AMENDMENTS

In the Claims:

Please amend claim 28 as follows:

28. (Amended) A method of simultaneously genotyping multiple samples in a single round of hybridization, the method comprising:

1) incubating a microarray of polynucleotide samples from multiple individuals with a probe mixture of oligonucleotides of known sequence, wherein

a) the microarray contains a plurality of samples containing genotypes of interest with each sample in a distinct location,

b) each sample has polynucleotides with a defined segment containing a marker selected from a marker for a gene and markers for one or more allelic variants of the gene,

c) the oligonucleotides in the probe mixture consist essentially of oligonucleotides of known sequence and length and having sequences specifically complementary to those within the defined segments for each sample for which a genotype is to be determined, wherein the oligonucleotides complementary to the polynucleotides are selected from those with sequences complementary to a segment containing the marker for (1) a gene, (2) one or more allelic variants of the gene, and (3) a gene and one or more allelic variants of the gene, and also consisting essentially of, optionally, control oligonucleotides,

d) the incubating forms hybrids of polynucleotides of the array and complementary oligonucleotides and allows discrimination at single nucleotide resolution; and

2) detecting stable hybrids formed during the incubation, if any, wherein the formation of a hybrid or lack of formation of a hybrid after a single round of hybridization is indicative of a genotype of a mammal.

Please add claim 46.

46. (New) The method of claim 28 wherein the mammal is a human.